PROJECT DESCRIPTION

<u>GENERAL</u>

THIS PROJECT INVOLVES A TRAFFIC SIGNAL MODIFICATION IN CONJUNCTION WITH GEOMETRIC IMPROVEMENTS ON THE EAST AND WEST LEG OF THE INTERSECTION OF US ROUTE 2 (SOLOMONS ISLAND ROAD) AND VIRGINIA AVENUE /SOUTH RIVER ROAD. THESE IMPROVEMENTS WILL INVOLVE THE ADDITION OF A DESIGNATED RIGHT TURN LANE AND A COMBINATION THROUGH LEFT LANE, PROVIDING A DUAL LEFT ON EACH APPROACH. IMPROVEMENTS WILL ALSO PROVIDE FOR SPLIT PHASING OF VIRGINIA AVENUE AND SOUTH RIVER ROAD. US ROUTE 2 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THIS INTERSECTION OPERATES IN A NEMA FOUR-PHASE, FULLY-ACTUATED MODE. MD 2 THROUGH MOVEMENTS OPERATE CONCURRENTLY. VIRGINIA AVENUE AND SOUTH RIVER ROAD WILL OPERATE USING SPLIT PHASING.

CONTROLLER REQUIREMENTS

USE EXISTING EIGHT-PHASE, FULLY ACTUATED TRAFFIC CONTROLLER HOUSED IN A NEMA "6" BASE-MOUNTED CABINET.

SPECIAL NOTES

- 1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARDPLATES FOR TRAFFIC CONTROL: 104.00 104.00-30, 104.31-01 (FLAGGING OPERATION), 104.33-01 (SHOULDER WORK), 104.35 (LANE SHIFT), 104.32-01 (INTERSECTION FLAGGING OPERATION).
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PULLING ALL CABLE TO THE CABINET AND SHALL PROPERLY LABEL EACH CABLE, ALL INTERNAL WIRING SHALL BE DONE BY SHA SIGNAL FORCES. CONTACT ED RODENHIZER AT LEAST 72 HOURS PRIOR TO INSTALLATION.
- 3. ALL UNDERGROUND AND OVERHEAD UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING MISS UTILITY PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THEN THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT CONFLICT MAY BE RESOLVED.

PROJECT CONTACTS

THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

G,H,J,N,O,P

G,H,J,N,O,P

MR. GREG WELKER DISTRICT ENGINEER (410) 841–1001

MS. KIMBERLY TRAN ASST. DISTRICT ENGINEER-TRAFFIC (410) 841-1019

MR. JOE HORTY
DISTRICT ENGINEER-UTILITY
(410) 841-1040

PULL EX. LOOP WIRES (3)

AND I/C THROUGH NEW BORÉ

MR. JAMES FOLDEN ASST. DISTRICT ENGINEER-CONSTRUCTION (410) 841–1031

MR. JOHN MAYS ASST. DISTRICT ENGINEER-MAINTENANCE (410) 841-1013

MR. ED RODENHIZER SIGNAL OPERATIONS SUPERVISOR (410) 787–7650

S FOLDEN POWER COMPANY:

WIRING DIAGRAM

A,B,C,D -

BG&E 7313 PARKWAY DRIVE HANOVER, MD 21076 PHONE: (410) 850-4620

- A,B,C,D,G,H,J,K,L,M,N,O,P

— G,H,J,K,L,M,N,O,P

WIRING LEGEND

7 CONDUCTOR (No.14 AWG) CABLE

5 CONDUCTOR (No.14 AWG) CABLE

2 CONDUCTOR (No.14 AWG) CABLE (ALUMINUM SHEILDED) PROPOSED

--- PROPOSED LOOP DETECTOR

— EXISTING LOOP DETECTOR

OVERHEAD POWER SOURCE

---- GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY SHA.

NONE

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

QUANTITY	<u>UNITS</u>	SPECIFICATION SECTION	DESCRIPTION
1	LS	104	MAINTAINENCE OF TRAFFIC
1	LS	108	MOBILIZATION
3	CY	205	TEST PIT EXCAVATION
250	LF	549	5 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE
15	LF	549	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE
50	LF	549	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE
95	SF	549	WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING SYMBOL
25	SF	611	DETECTABLE WARNING SURFACE FOR CURB RAMPS
3	EA	804	GROUND ROD - 3/4 INICH DIAMETER x 10 FOOT LENGTH
110	LF	805	2 INCH SCEDHULE 80 RIGID PVC CONDUIT - TRENCHED
110	LF	805	3 INCH SCEDHULE 80 RIGID PVC CONDUIT - TRENCHED
80	, LF	805	2 INCH SCEDHULE 80 RIGID PVC CONDUIT - BORED
100	LF	805	1 INCH RIGID GALVANIZED CONDUIT FOR LOOP DETECTOR SLEEVE
2,600	LF	810	LOOP WIRE ENCASED IN 1/4 INCH FLEXIBLE TUBING (No. 14 AWG)
2,850	LF	810	ELECTRICAL CABLE - 2 CONDUCTOR (No. 14 AWG) (ALUMINUM SHIELDED)
750	LF	810	ELECTRICAL CABLE - 7 CONDUCTOR (No. 14 AWG)
3	EA	811	FURNISH AND INSTALL ELECTRICAL HANDHOLE
300	LF	812	WOOD SIGN SUPPORTS 4 INCH X 4 INCH
63	SF	813	FURNISH AND INSTALL SHEET ALUMINUM SIGNS CONSISTING OF:
			1 EA R1-1 30" x 30" STOP 3 EA R3-2 24" x 24" NO LEFT TURN 1 EA R3-2 30" x 30" NO LEFT TURN 2 EA R3-5L 30" x 36" LANE USAGE: LEFT TURN ONLY 2 EA R3-6L 30" x 36" LANE USAGE: LEFT-THRU TURN 1 EA R4-7 18" x 24" KEEP RIGHT 1 EA R6-1R 36" X12" ONE WAY: RIGHT
22	EA	814	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
900	L F	815	SAW CUT FOR LOOP DETECTOR

EQUIPMENT LIST "C"

ALL MATERIAL REMOVED IN ACCORDANCE WITH THESE PLANS SHALL BECOME THE PROPERTY

OF THE CONTRACTOR.

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

PHASE CHART

	1 (R) (Y) (G)	2 (R) (Y) (G)	3 (R) (Y) (G)	4 R Y G	5 (R) Y (B) (G)	6 R Y 8	7 (R) (Y) (G)	8 (R) Y (G) (G)	9 (8) (9) (8)	10 R Y	11	12	
PHASE 2+6	G	G	G	G	R	R	R	R	R	R	DW	DW	
PHASE 2+6 CHANGE	Υ	Υ	Υ	Y	R	R	R	R	R	R	DW	DW	≡ π
PHASE 3	R	R	R	R	R	R	R	∢G-/G	⁴G-/G	G	DW	DW	⊨
PHASE 3 CHANGE	R	R	R	R	R	R	R	Υ	Υ	Υ	DW	DW	= +1r
PHASE 4	R	R	R	R	∢G-/ _G	∢G-/ _G	G	R	R	R	DW	DW	→
PHASE 4 CHANGE	R	R	R	R	Υ	Υ	Υ	R	R	R	DW	DW	==
ALT PHASE 4	R	R	R	R	∢G-/ _G	4G-/ _G	. G	R	R	R	W	W	1-1/1-
ALT PHASE 4 PED CLEAR	R	R	R	R	∢G-/G	∢G-/ _G	G	R	R	R	FL/DW	FL/DW	
ALT PHASE 4 CHANGE	R	R	R	R	Y	Υ	Υ	R	R	R	DW	DW	Ţπ
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	++

SHA

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

office of traffic & safety
traffic engineering design division

MD 2 (SOLOMONS ISLAND ROAD) AT
VIRGINIA AVENUE /SOUTH RIVER ROAD

ANNE ARUNDEL COUNTY, MARYLAND

SCALE N/A DATE 14 JAN 2009 CONTRACT NO. _



WELLS + ASSOCIATES, INC

FRANSPORTATION, TRAFFIC AND PARKING CONSULTANTS

5 Wirt Street SW, Suite 300, Leesburg, Virginia 20175
Phone: 703/ 443-1442 Facstmile: 703/ 443-1225

1420 Spring Hill Road, Suite 600, McLean, Virginia 22102
Phone: 703/ 917-6620 Facsimile: 703/ 917-0739

SHEET NO. 2 OF 2

PLOTTED:
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DRAWING NO. TS-1835C-GI